

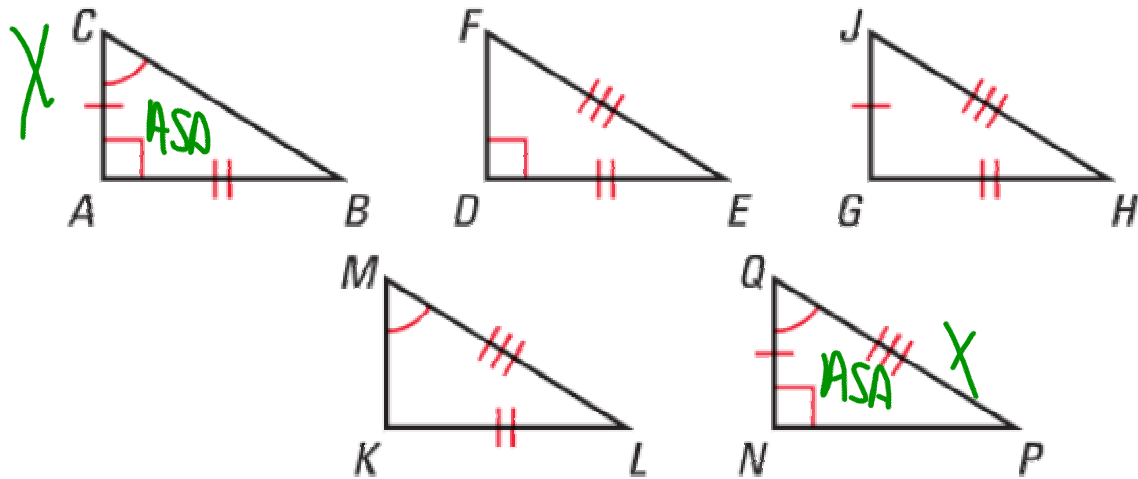
10/11/13 Agenda

- Warm Up
- Review Homework - Worksheet 8
- Section 4.6 - CPCTC
- Start Homework
 - Worksheet 9 - CPCTC

Homework out!

Warm Up:

CHALLENGE Which of the triangles below are congruent?



Section 4.6 - Use Congruent Triangles (CPCTC)

Target 4G

Goal: Apply CPCTC.

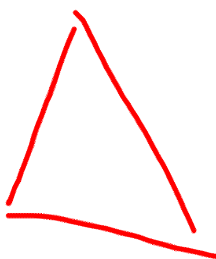
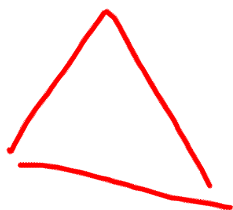
CPCTC: Is short for : Corresponding Parts of Congruent
Triangles are Congruent

We can use it: After we have proved triangles congruent.

We use it to: Prove any parts (sides and angles) congruent.

3 \angle s

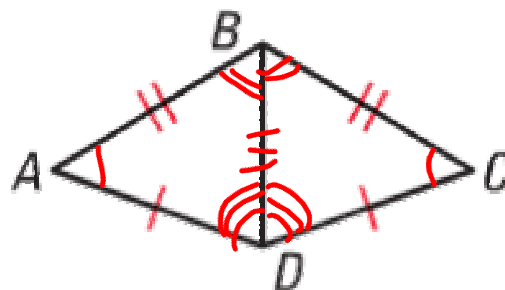
3 SIDES



Section 4.4 - HL Congruency

Target 4E & 4F

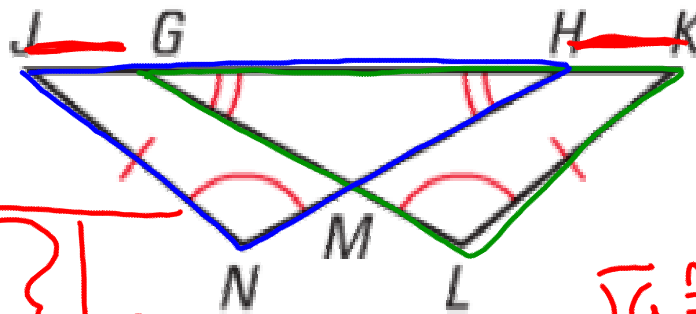
GIVEN:
prove that $\angle A \cong \angle C$.



| STMT. | REASON |
|---|--------------------|
| 1. $\overline{AB} \cong \overline{BC}$ $\overline{AD} \cong \overline{DC}$ | 1. GIVEN |
| 2. $\overline{BD} \cong \overline{BD}$ | 2. REFLEXIVE PROP. |
| 3. $\triangle ABD \cong \triangle CBD$ | 3. SSS |
| 4. $\angle A \cong \angle C$ | 4. CPCTC |

Prove: $\overline{GK} \cong \overline{HJ}$ **Then prove:** $\overline{JG} \cong \overline{HK}$

Prove:
 $\overline{GK} \cong \overline{HJ}$



$$1. \overline{JN} \cong \overline{KL}$$

$$\angle N \cong \angle L$$

$$\angle HGL \cong \angle GHN$$

$$2. \triangle HNJ \cong \triangle GLK$$

$$3. \overline{GK} \cong \overline{HJ}$$

GIVEN

2. AAS

3. CPCTC

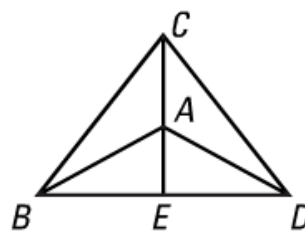
$$\overline{JG} \cong \overline{HK}$$

Section 4.6 - Use Congruent Triangles (CPCTC)

Target 4G

In the diagram, $\overline{CE} \perp \overline{BD}$ and $\angle CAB \cong \angle CAD$.

Prove $\angle ABE \cong \angle ADE$



Prove: 19. $\triangle TUV, \triangle TWV$

